(a) a claim to priority under §119(e) of the above captioned application to the aforementioned provisional application was timely perfected (please see the attached filing receipt (Exhibit A) acknowledging the priority claim); and

(b) the provisional application discloses the subject matter of claims 29-34 and 43-48 in accordance with 35 U.S.C. §112, first paragraph,

the claims rejected over the Stern reference are entitled to the filing date of the provisional application (Exhibit B). The filing date of the provisional application is July 5, 2000, and this date is before the "§102(e) date" of the Stern reference, June 12, 2001.

Examples of support provided in the provisional application for each of the rejected claims (i.e., each of claims 29-34 and 43-48):

Independent Claim 29:

Examples of support in the provisional application of the subject matter of claim 29 include, but are not necessarily limited to, the following:

Figure 2A.

Claim 3 of the provisional application.

Page 4, lines 8-10 (of the provisional application): **FIG. 2A** is a 6 discontinuous strut **PLANAR SGS** with a radial arrangement of guys in 8 of the 20 faces of the icosahedron. This represents the minimal total length of guy members for the case of the icosahedron with guys on an edge or in the face planes.

Page 7, lines 10-13: A radial arrangement of guys can be used to connect the strut ends forming the "end-planes" of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of the polygons

formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures.

Independent Claim 30:

Examples of support in the provisional application of the subject matter of claim 30 include, but are not necessarily limited to, the following:

Figure 2B.

Claim 3 of the provisional application.

Page 4 lines 12-14: **FIG.2B** is a 6 discontinuous strut **PLANAR SGS** with an "internal" guy arrangement which can further reduce the total length of guy members necessary to provide integrity to the icosahedron.

Page 7, lines 16-21: An internal arrangement of guys can be used to connect the strut ends forming the "end-planes" in combination with the riser guys of the **HYPERBOLOID** and the **HY-PAR Sis's** as well as the faces of the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL Sis's** as shown in the figures. In this internal arrangement the guys are internal to the "end-planes" or faces of these structures.

Independent Claim 31:

Examples of support in the provisional application of the subject matter of claim 31 include, but are not necessarily limited to, the following:

Page 5, lines 19-25: This invention, **SELF-GUYED STRUCTURES (SGS's),** is a series of static structures formed from a plurality of interconnected rigid compression members or struts and flexible tension members or guys (e.g. wire cables, chains or elastic cords). Each strut is in pure compression (i.e. no bending or twisting forces) and each guy is in pure tension. The struts are

discontinuous in several embodiments of the invention, intersect at an internal or peripheral point in others, or radiate outwardly from an internal central point in still others.

Dependent Claim 32:

Examples of support in the provisional application of the subject matter of claim 32 include, but are not necessarily limited to, the following:

Page 7, lines 16-21: An internal arrangement of guys can be used to connect the strut ends forming the "end-planes" in combination with the riser guys of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures. In this internal arrangement the guys are internal to the "end-planes" or faces of these structures.

Dependent Claim 33:

Examples of support in the provisional application of the subject matter of claim 33 include, but are not necessarily limited to, the following:

Page 7, lines 10-13: A radial arrangement of guys can be used to connect the strut ends forming the "end-planes" of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures.

Dependent Claim 34:

Examples of support in the provisional application of the subject matter of claim 34 include, but are not necessarily limited to, the following:

Page 7, lines 5-8: A circumferential arrangement of guys can be used to connect the strut ends forming the "end-planes" of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of

the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures.

Independent Claim 43:

Examples of support in the provisional application of the subject matter of claim 43 include, but are not necessarily limited to, the following:

Figures 5A, 5B, and 5C.

Page 4, lines 43-45: **FIG. 5A** is a 4 discontinuous strut **POLYGONAL SGS** whose outer strut ends form the vertices of a tetrahedron with circumferential guys and with the inner guys forming a skewed quadralateral as they connect the inner strut ends.

Page 5, lines 1-3: **FIG. 5B** is a 6 discontinuous strut **POLYGONAL SGS's** whose outer strut ends become the vertices of an octahedron with radial guys in four of the 8 faces and whose inner strut ends form a three sided prism with circumferential guys for all prism faces.

Page 5, lines 5-8: **FIG. 5C** is a 8 discontinuous strut **POLYGONAL SGS's** whose outer strut ends form the vertices of a cube with circumferential guys and whose inner strut ends form a four sided prism with circumferential guys for all prism faces.

Page 6, lines 40-46: **POLYGONAL SGS's** have four or more discontinuous struts arranged in a generally radial (but not precisely radial) configuration. The inward ends of these struts are connected by guys which react the inward radial forces. The inner strut ends form a skewed quadralateral in the tetrahedral version and a three and four sided prism for the octahedral and the cubic **POLYGONAL SGS's** and other configurations for other polygons. Three inner and three outer guy configurations are claimed for the **POLYGONAL SGS's** as described below.

Dependent Claim 44:

Examples of support in the provisional application of the subject matter of claim 44 include, but are not necessarily limited to, the following:

Page 7, lines 16-21: An internal arrangement of guys can be used to connect the strut ends forming the "end-planes" in combination with the riser guys of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures. In this internal arrangement the guys are internal to the "end-planes" or faces of these structures.

Dependent Claim 45:

Examples of support in the provisional application of the subject matter of claim 45 include, but are not necessarily limited to, the following:

Page 7, lines 10-13: A radial arrangement of guys can be used to connect the strut ends forming the "end-planes" of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures.

Dependent Claim 46:

Examples of support in the provisional application of the subject matter of claim 46 include, but are not necessarily limited to, the following:

Figures 5A, 5B and 5C.

Page 7, lines 5-8: A circumferential arrangement of guys can be used to connect the strut ends forming the "end-planes" of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures.

Independent Claim 47:

Examples of support in the provisional application of the subject matter of claim 47 include, but are not necessarily limited to, the following:

Figures 1A, 1E, 1G, 2A, 3A, 3B, 3C, 3D, 4A, 4C and 5B.

Page 3, lines 22-24: **FIG. 1A** is a 3 discontinuous strut **HYPERBOLOID SGS** with a circumferential guy arrangement in the top end "plane" and a radial guy arrangement in the bottom end "plane".

Page 3, lines 40-42: **FIG. 1E** is a 4 discontinuous strut **HYPERBOLOID SGS** with a radial guy configuration in the bottom end "plane" and a circumferential guy configuration in the top end "plane".

Page 4, lines 1-2: **FIG. 1G** is a 6 discontinuous strut **HYPERBOLOID SGS** with radial guy arrangements in the end "planes".

Page 4, lines 8-10: **FIG. 2A** is a 6 discontinuous strut **PLANAR SGS** with a radial arrangement of guys in 8 of the 20 faces of the icosahedron. This represents the minimal total length of guy members for the case of the icosahedron with guys on an edge or in the face planes.

Page 4, lines 16-18: **FIG.3A** is a 6 discontinuous strut **HYP-PAR SGS** with a radial arrangement of guys between the elements of the separate hyperbolic paraboloid surfaces and a linear arrangement of guys between elements of the same hyperbolic paraboloid surface.

Page 4, lines 20-22: **FIG. 3B** is a 10 discontinuous strut **HYP-PAR SGS** with one of the hyperbolic paraboloid surfaces having six elements and the other two having two each. Guy arrangements are the same as **FIG. 3A.**

Page 4, lines 24-25: **FIG. 3C** is the same as **FIG. 3A** with the struts within each hyperbolic paraboloid surface spread farther apart. Guy arrangements are the same.

Page 4, lines 27-28: **FIG. 3D** is a 18 discontinuous strut **HYP-PAR SGS** with each of the 3 hyperbolic paraboloid surfaces containing 6 struts. Guy arrangements are the same as **FIG. 3A.**

Page 4, lines 30-33: **FIG. 4A** is a 6 strut **RADIAL SGS** whose strut ends form the vertices of an octahedron and with a radial arrangement of guys in 4 of the eight faces of this octahedron. This represents the minimal total guy member length to provide sufficient structural integrity for the octahedron.

Page 4, lines 38-41: **FIG. 4C** is a 12 strut **RADIAL SGS** whose strut ends form the vertices of a cuboctahedron and with a radial arrangement of guys in the eight triangular faces of the cuboctahedron. This represents the minimal total guy member length to provide structural integrity to the cuboctahedron.

Page 5, lines 1-3: **FIG. 5B** is a 6 discontinuous strut **POLYGONAL SGS's** whose outer strut ends become the vertices of an octahedron with radial guys in four of the 8 faces and whose inner strut ends form a three sided prism with circumferential guys for all prism faces.

Page 7, lines 10-13: A radial arrangement of guys can be used to connect the strut ends forming the "end-planes" of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures.

Independent Claim 48:

Examples of support in the provisional application of the subject matter of claim 48 include, but are not necessarily limited to, the following:

Figures 1B, 2B and 4B.

Page 3, lines 26-27: **FIG. 1B** is a 3 discontinuous strut **HYPERBOLOID SGS** with an "internal" guy arrangement.

Page 4, lines 12-14: **FIG.2B** is a 6 discontinuous strut **PLANAR SGS** with an "internal" guy arrangement which can further reduce the total length of guy members necessary to provide integrity to the icosahedron.

Page 4, lines 35-36: **FIG. 4B** is an 8 strut **RADIAL SGS** whose strut ends form the vertices of a cube and with an "internal" arrangement of guy members.

Page 7, lines 5-8: An internal arrangement of guys can be used to connect the strut ends forming the "end-planes" in combination with the riser guys of the **HYPERBOLOID** and the **HY-PAR SGS's** as well as the faces of the polygons formed by the strut ends of the **PLANAR, RADIAL** and **POLYGONAL SGS's** as shown in the figures. In this internal arrangement the guys are internal to the "end-planes" or faces of these structures.

IV. CONCLUSION

This response addresses the above-referenced Office Action. The Applicant has indicated how the subject matter of the claims rejected over the Stern reference are indeed disclosed in the provisional application to which the instant application claims priority. The Applicant requests that the rejections be withdrawn in view of the fact that said provisional application has a filing date before the 35 U.S.C. §102(e) date of the Stern reference, and because, as Applicant submits, said provisional application discloses the subject matter of the rejected claims. The Applicant respectfully requests that the Examiner reconsider the application and allow pending claims at his earliest convenience. Finally, should the examiner have any remaining questions or disagree with any of Applicant' s arguments, it is requested that the examiner contact the undersigned by telephone in order to expedite the processing of this application.

Dated this 23rd day of August, 2004.

Respectfully submitted,
SANTANGELO LAW OFFICES, P.C.

Alfred K. Wiedmann Jr.
ATTORNEY FOR APPLICANT
PTO No. 48,033
125 South Howes Street, Third Floor
Fort Collins, Colorado 80521
(970) 224-3100